

CLAIMS:

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1. A covered, coiled drug delivery stent comprising:  
a coiled, radially-expandable stent body comprising an outer surface;  
a porous covering overlying the outer surface;  
a drug associated with the porous covering; and  
said stent, porous covering and drug constituting a stent subassembly.
  2. The covered stent according to CLAIM 1 wherein the stent body comprises  
10 spaced-apart parallel side elements joined by connector elements.
  3. The covered stent according to CLAIM 1 wherein the stent body is made of  
metal.
  - 15 4. The covered stent according to CLAIM 1 wherein the stent body is made of  
nickel-titanium.
  - 20 5. The covered stent according to CLAIM 1 wherein the porous covering  
comprises ePTFE.
  6. The covered stent according to CLAIM 1 wherein the drug and the porous  
covering comprises a drug/porous covering matrix.
  - 25 7. The covered stent according to CLAIM 1 wherein the drug is situated between  
the outer surface and the porous covering.
  8. The covered stent according to CLAIM 1 wherein the drug overlies the porous  
covering.

9. The covered stent according to CLAIM 1 further comprising means for delaying migration of said drug from said stent subassembly.

10. The covered stent according to CLAIM 9 wherein the drug migration delaying means comprise a drug/biodegradable material matrix wherein said drug is interspersed within a biodegradable material.

11. The covered stent according to CLAIM 1 wherein the drug is micro-encapsulated using a biodegradable encapsulation material so as to delay migration of said drug from the stent subassembly.

12. The covered stent according to CLAIM 1, further comprising a removable protective layer covering said stent subassembly so that when removed, said drug may migrate from said stent subassembly.

13. The covered stent according to CLAIM 12 wherein the protective layer comprises a biodegradable material so that said protective layer is removed when it biodegrades.

14. The covered stent according to CLAIM 13 wherein the biodegradable material comprises a biodegradable polymer.

15. The covered stent according to CLAIM 12 wherein the protective layer comprises a sheath which can be pulled off of the stent subassembly to remove protective layer from the stent subassembly.

16. The covered stent according to CLAIM 1 wherein the drug comprises one or more of the following:

NO generators, paclitaxel, statins, taxol, heparin in its various forms, i.e., low molecular weights, thienopyridines, glycoprotein IIb/IIIb inhibitors, antiplatelet agents,

antithrombins, fibrinolytics, anticoagulants, thrombolytics, abciximab, rapamycin, hirudin, VEGF, Hirulog, ticlopidine and clopidogrel.

17. The covered stent according to CLAIM 1 wherein the drug comprises taxol.

18. The covered stent according to CLAIM 1 wherein the drug comprises heparin.

19. The covered stent according to CLAIM 1 wherein the drug comprises rapamycin.

20. A covered, coiled drug delivery stent comprising:  
a coiled, radially-expandable stent body comprising spaced-apart parallel side elements joined by connector elements and an outer surface;  
a porous covering, comprising ePTFE, overlying the outer surface;  
a drug associated with the porous covering;  
said stent body, porous covering, and drug constituting a stent subassembly; and  
a biodegradable protective layer covering said stent subassembly so that when said protective layer biodegrades, said drug may migrate from said stent subassembly.

21. A method for delivering a drug to a patient comprising:  
directing a covered, coiled stent subassembly, comprising a drug associated with a porous covering which overlies a coiled, radially-expandable prosthesis, to a target site within a patient;  
waiting for a protective material, initially shielding the drug, to be effectively removed from said stent subassembly thereby exposing said drug; and  
permitting said the drug to migrate from said stent subassembly for interaction with the patient.

22. The method according to CLAIM 21 wherein the directing step is carried out using a drug comprising at least one of the following:

NO generators, hirudin, Paclitaxel, Rapamycin, statins, taxol, heparin in its various forms, i.e., low molecular weights, thienopyridines, glycoprotein IIb/IIIa inhibitors, antiplatelet agents, antithrombins, fibrinolytics, anticoagulants, thrombolytics, abciximab, rapamycin, hirudin, VEGF, Hirulog, Ticlopidine and clopidogrel.

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23. The method according to CLAIM 21 wherein the directing step is carried out with the drug at at least one of the following locations: underlying the porous covering, overlying the porous covering and incorporated into the porous covering to create a drug/porous covering matrix.

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24. The method according to CLAIM 21 wherein the waiting step comprises waiting for a biodegradable material, initially enclosing the drug, to biodegrade thus exposing the drug.

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25. The method according to CLAIM 21 wherein the waiting step comprises waiting for the protective layer covering the subassembly to biodegrade.

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26. The method according to CLAIM 21 wherein the waiting step comprises waiting for a protective covering the subassembly to be at least partially pulled off of the stent.

27. The method according to CLAIM 21 further comprising removing the stent subassembly from the patient following the permitting step.